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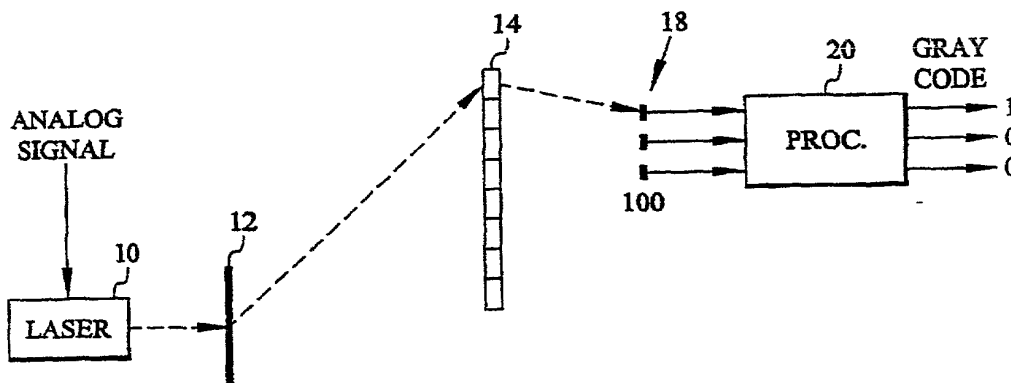
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(54) Title: **A/D CONVERSION METHOD AND APPARATUS**



(57) Abstract: An opto-electronic A/D converter includes a tunable laser (10) for wavelength modulating a narrowband coherent electromagnetic beam by the amplitude of the analog signal. A grating (12) transforms the wavelength modulated beam into a corresponding angularly modulated beam. A set of kinoforms (14) diffract the angularly modulated beam into a bundle of diffracted beams. Detectors (18, 20) determine the digital signal by repeatedly sampling the spatial power distribution of the diffracted beams.